

## ABSTRACT

- 5 A diffractive optical element has a diffraction grating formed by periodic depressions and projections on the surface of a substrate and a dielectric multilayer film on the diffraction grating. The materials of the respective layers of the film are chosen such that the depth of the depressions is an integral multiple of the sum of the thickness of the layers in one period of the film. As a result, individual layers of the film are continuous across multiple depressions and projections, to provide improved first-order reflectance.